



2-Player Pong Game with Arduino Uno

Written By: Onur Avun



TOOLS:

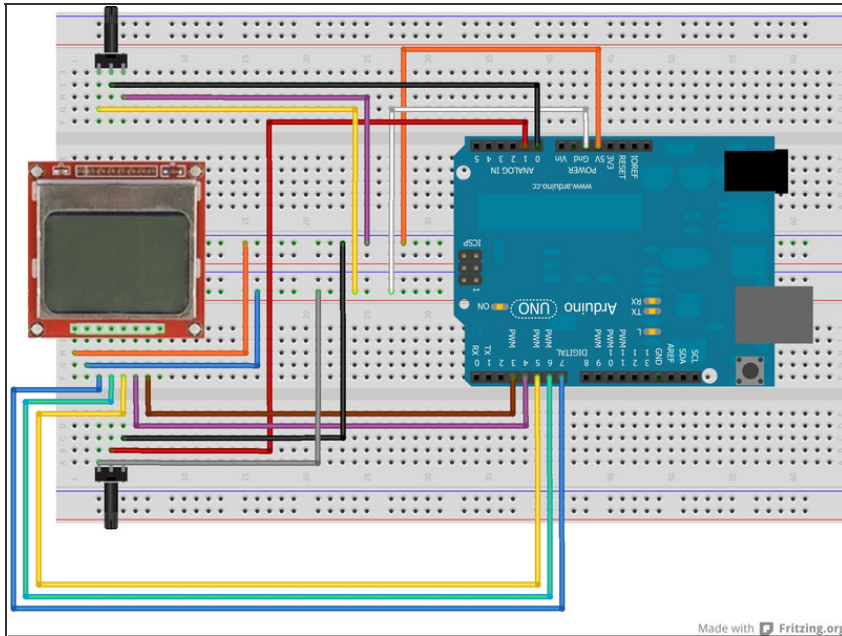
- [Arduino Uno \(1\)](#)
- [Breadboard \(1\)](#)
- [Jumper Wire \(20\)](#)
- [PCD8544 LCD screen \(1\)](#)
Nokia5110 screen
- [Potentiometer, 5kΩ \(2\)](#)

SUMMARY

Classical Pong game implemented on an Arduino Uno using a PCD8544 LCD screen which is better known as the Nokia 5110 screen.

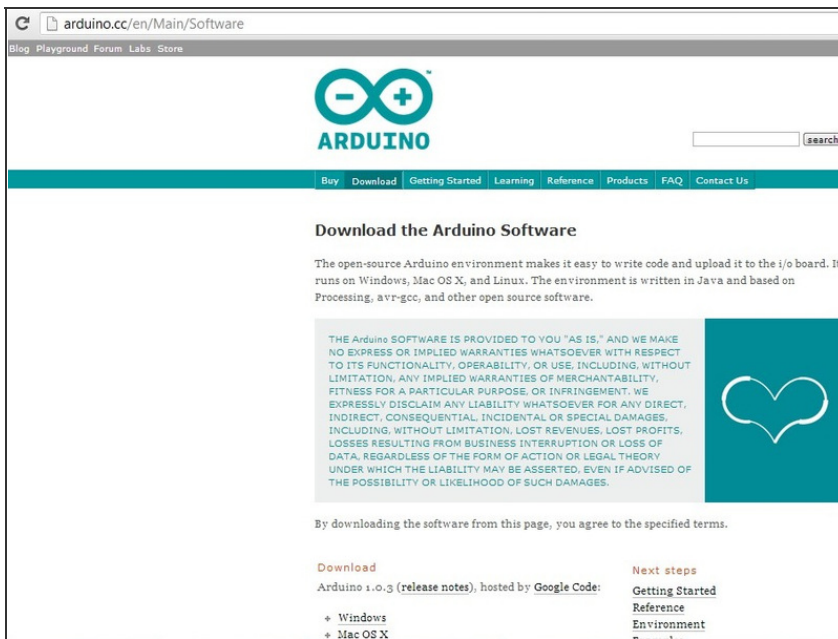
Player bars are controlled by a potentiometer for each player. If you want the bar to go left, just turn the potentiometer left.

Step 1 — 2-Player Pong Game with Arduino Uno



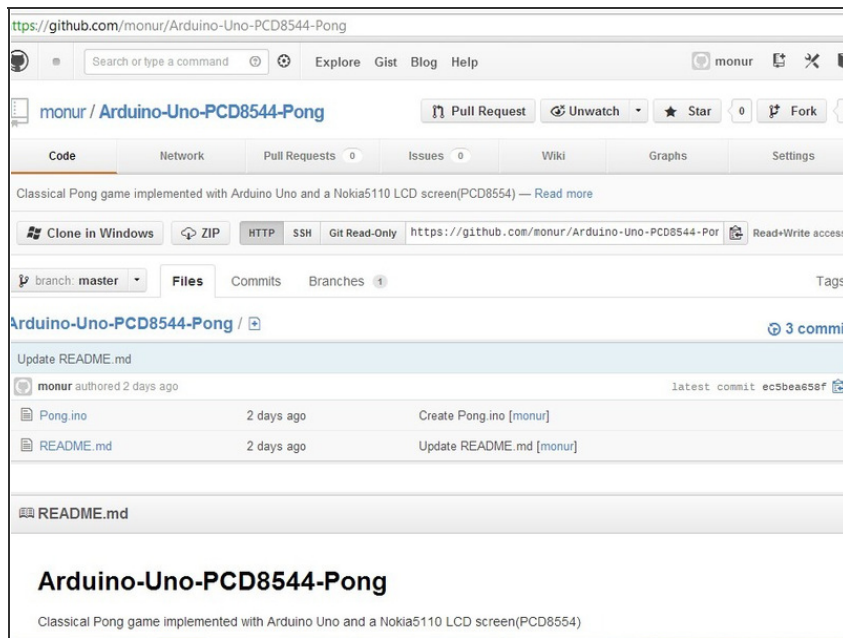
- Connect the Arduino Uno, PCD8544 LCD screen and 2 potentiometers as shown in the Fritzing diagram.

Step 2



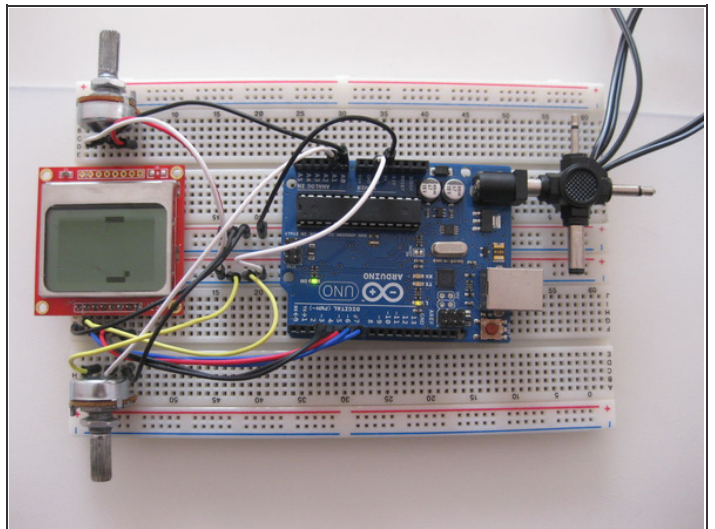
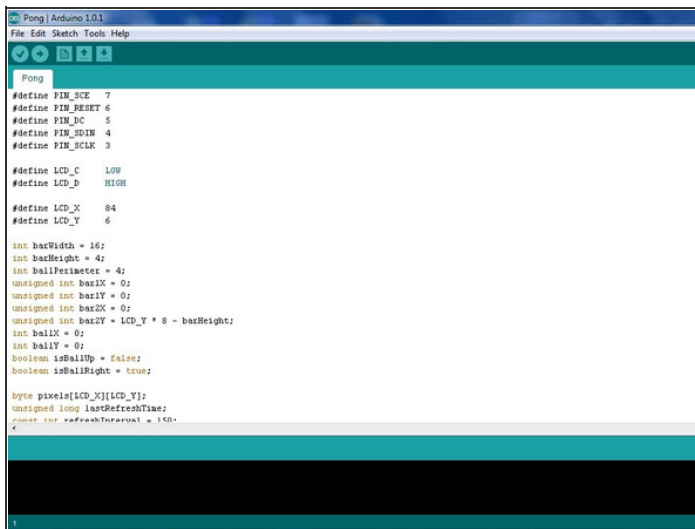
- Download Arduino software from <http://arduino.cc/en/Main/Software>

Step 3



- Download the Arduino sketch (Pong.ino file) from <https://github.com/monur/Arduino-Uno-PCD8544-Pong>

Step 4



- Open Pong.ino sketch with Arduino IDE software
- Connect the Arduino Uno to your computer with a USB cable.
- In the Arduino IDE software menu, select Tools->Board->Arduino Uno
- In the Arduino IDE menu, select File->Upload or use the shortcut key combination Ctrl-U
- The game starts in the LCD screen. You can control the bars using the potentiometers.